

ATMOSPHERIC ELECTRICITY.

Thunder Storms.—Comparatively few have been reported during the month and mostly from the northern sections of the country. The most extensive, as well as severe, was that of the 15th and 16th. Distributed among the several States, they were reported on the following dates:—*Maine*: 23rd. *Massachusetts*: 12th, 23rd, 25th, 30th and 31st. *New York*: 3rd, 12th and 16th. *Virginia*: 15th, 22nd and 30th. *North Carolina*: 22nd. *Florida*: 3rd, 5th, 7th and 28th. *Tennessee*: 3rd, 14th, 15th, 16th and 26th. *Kentucky*: 14th and 15th. *Ohio*: 1st, 2nd, 14th, 15th, 17th and 21st. *Indiana*: 1st and 15th. *Illinois*: 1st, 2nd, 3rd, 14th, 15th, 21st, 24th and 25th. *Michigan*: 1st, 2nd, 3rd, 4th, 15th and 25th. *Wisconsin*: 10th and 16th. *Iowa*: 1st, 2nd, 3rd, 10th, 11th, 13th, 15th and 24th. *Missouri*: 15th and 25th. *Mississippi*: 27th. *Louisiana*: 3rd, 27th and 28th. *Texas*: 2nd, 3rd, 13th, 15th, 16th, 21st, 26th and 27th. *Indian Territory*: 13th, 15th and 25th. *Kansas*: 2nd and 20th. *Nebraska*: 2nd, 3rd and 13th. *Colorado*: 26th. *New Mexico*: 24th.

Auroras.—The most extensive occurred on the evenings of the 7th, 28th and 30th, and the early morning of the 31st, and were reported by various observers, both Signal Service and Voluntary, from stations reaching eastward from Dakota to Maine, and southward to the 37th parallel. That of the 30th, although very probably present in the Lower Lake region, Tennessee and the Ohio valley, was not visible on account of cloudy and threatening weather. The most frequent and profuse displays were observed in the New England States, followed next in order by Michigan and Minnesota. A detailed description from stations arranged by States will give data of additional interest, as follows: *Maine*: Portland, 28th, 1:15 to 1:45 a. m., no motion; 31st, 11:15 to 11:40 p. m. Eastport, 7th, 9 p. m. Bangor, 29th, 1:00 to 3:00 a. m. Cornish, 7th, 25th, 28th, faint. Gardiner, 6th, 8th, 25th, 27th, 31st, faint. Orono, 1st. *New Hampshire*: Mt. Washington, 7th, 11 p. m., till morning; 25th, 9 p. m., till morning; 27th, 9 p. m., till morning. Grafton, 25th, 8:00 to 11:00 p. m., parallel and horizontal bands of dark blue and white. *Vermont*: Burlington, 1st, midnight to 12:30 a. m.; 4th, 9:00 p. m., to 12:15 a. m.; 7th, 10:00 p. m., to 12:15 a. m.; 25th, 6:40 to 8:30 p. m.; 11:15 p. m., to midnight. Windsor, 7th, 9:00 p. m. Newport, 7th, 25th, 28th. Woodstock, 31st, early morning. *Massachusetts*: Wood's Holl, 31st, 11:00 p. m. Springfield, 31st, 11:18 to 11:35 p. m. Cambridge, 7th, 9:00 to 12:00 p. m.; 12th, 10:30 p. m.; 23rd, 7:30 to 9:00 p. m.; 25th, 9:00 to 11:30 p. m. Fall River, 7th, 9:00 p. m., faint; 24th, 9:00 to 11 p. m.; 25th, vertical at 9:00 p. m.; scintillations very bright; streamers from the southwest; a very unusual occurrence here. Newburyport, 7th, 25th, 31st, all very faint, no streamers and variable till midnight. Rowe, 7th, 11:00 p. m. Somerset, 23d, 28th, diffuse yellow light. *Connecticut*: Southington, 23d, 9:00 p. m.; 25th; 31st, 11:00 p. m. New London, 25th, 9:10 to 10:20 p. m. *Rhode Island*: Newport, 7th, 11:00 to 11:30 p. m.; 23d, 8 to 9:30 p. m. *New York*: Ardenia, 14th, 9:00 p. m. Argyle, 7th, 7 to 9 p. m., diffuse; 25th, 7 to 9 p. m. Rochester, 8:55 to 10:45 p. m. *Virginia*: Wytheville, 31st, tinged with red. *Michigan*: Lansing, 31st, 1:30 a. m. Litchfield, 1st, 6th, 9th, 22d, all visible at 9:00 p. m. Port Huron, 28th, 1:10 to 2:20 a. m., color pale green, with faint streamers. *Wisconsin*: Manitowoc, 7th, 8:30 to 10:00 p. m., streamers. Ripon, 7th, 9:00 p. m., faint above a dark cloud. Milwaukee, 31st, 1 a. m., merry dancers. *Illinois*: Springfield, 9th, 10:00 p. m. Sterling, 31st, early morning. *Iowa*: Cresco, 31st, early morning, very faint. Ft. Madison, 30th, faint. Monticello, 30th, 11 p. m. Independence, 7th. *Minnesota*: St. Vincent, 1st, 8 p. m.; 7th; 9th, 4 a. m.; 23d, 9 p. m. St. Paul, 30th, 9 to 11 p. m. *Dakota*: Bismarck, 30th, 9 p. m. to midnight. Yankton, 31st, 2 a. m., faint arch. *Nebraska*: Clear Creek, 28th, p. m., faint.

Atmospheric Electricity Interfering with Telegraph Lines.—Umatilla, Or., 13th and 25th. El Paso, Tex., 23rd. Socorro, N. M., 2nd, 11th, 12th and 24th. Pilot Point, Tex., 2nd, 21st and 26th. Decatur, Tex., 26th. Jacksboro, Tex., 2nd and 21st. San Antonio, Tex., 27th. Fort Davis, Tex., 2nd. Stockton, Tex., 14th.

Zodiacal Light.—St. Vincent, Minn., 1st. Nashville, Tenn., 2nd, 6th to 14th and 31st. Fall River, Mass., 2nd and 3rd. Somerset, Mass., 1st and 2nd.

MISCELLANEOUS PHENOMENA.

Butterflies.—San Antonio, Tex., 16th, 17th. Melissa, Tex., 21st.

Grasshoppers.—Coleman City, Tex., 28th, flying south in great numbers.

Meteors.—Sterling, Ill., 31st. Woodstock, Md., 5th, 21st. Williamstown, Mass., 21st, 28th. Ateo, N. J., 3rd, 25th. Penn Yan, N. Y., 5th. Bethel, Ohio, 13th; Wytheville, Va., 2nd.

Prairie and Forest Fires.—St. Vincent, Minn., 7th, 23rd, 24th. LaCrosse, 27th, 30th, 31st. Breckenridge, 1st, 2nd, 4th to 12th, 26th, 31st. Freehold, N. J., 13th. Wytheville, Va., 21st, 23rd to 26th, 29th.

Botanical.—Flushing, N. Y., 31st, wild flowers blooming. Elsworth, N. C., 21st, peach trees in bloom second time. Melissa, Tex., 22nd, roses in full bloom; potatoe vines still growing; 31st, cotton still blooming.

Polar Bands.—Portland, Or., 9th, 12th. Cleveland, 7th. Morgantown, 17th. New Haven, 17th.